

# IRON SHIP.

No. 2181 Survey held at Stockton Date, First Survey June 17/2/73 Last Survey Nov 18/73  
 On the Screw Steamer "Wimbledon" Yard Number 184 Master Watson  
 AGE under 18 1/2 years. 16  
 Tonnage Deck 184  
 Ditto of Third, Spar, or Awning Deck.  
 Ditto of Poop, or Raised Or. Dk.  
 Ditto of Houses on Deck  
 Ditto of Forecastle  
 Gross Tonnage 184  
 Less Crew Space 45  
 Less Engine Room 41  
 Register Tonnage 95  
 as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 SPAR, OR AWNING-DECKED VESSEL.  
 HALF BREADTH (moulded)... 16 Feet.  
 DEPTH from upper part of Keel to top of Upper Deck Beams 26  
 GIRTH of Half Midship Frame (as per Rule) 38  
 1st NUMBER 81  
 1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 74  
 LENGTH 250  
 2nd NUMBER 18500  
 PROPORTIONS—Breadths to Length Under 8  
 Depths to Length—Upper Deck to Keel Under 11  
 Main Deck ditto Under 15

Built at Stockton  
 When built 1872 Launched 18 1/2 Dec 72  
 By whom built Richardson, Duck & Co  
 Owners Dixon & Harris  
 Port belonging to London  
 Destined Voyage  
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule... 250 Feet. Inches. BREADTH—Moulded... 32 Feet. Inches. DEPTH top of Floors to Upper Deck Beams... 26 Feet. Inches. Do. do. Main Deck Beams... 14 Feet. Inches. Power of Engines... 180 Horse. N° of Decks with flat laid Two N° of Tiers of Beams Three

Dimensions of Ship per Register, length, breadth, depth,			Inches in Ship.		Inches per Rule.		16ths required	16ths required
KEEL, depth and thickness	9	2 1/2	9	2 1/2	9	2 1/2		
STEM, moulding and thickness...	8 1/2	2 1/2	8 1/2	2 1/2	8 1/2	2 1/2		
STERN-POST for Rudder do. do.	8 1/2	5	8 1/2	5	8 1/2	5		
for Propeller	8 1/2	5	8 1/2	5	8 1/2	5		
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		24		24			
FRAMES, Angle Iron, for 1/2 length amidships	4 1/2	3	4 1/2	3	4 1/2	3		
Do. for 1/4 at each end	4 1/2	3	4 1/2	3	4 1/2	3		
REVERSED FRAMES, Angle Iron	3	3	3	3	3	3		
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	2 1/2	10	2 1/2	10	2 1/2	10		
thickness at the ends of vessel	2 1/2	10	2 1/2	10	2 1/2	10		
depth at 1/2 the half-bdth. as per Rule	10 1/2	10	10 1/2	10	10 1/2	10		
height extended at the Bilges...	10 1/2	10	10 1/2	10	10 1/2	10		
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	6 1/2	4 1/2	6 1/2	4 1/2	6 1/2	4 1/2		
Single or double Angle Iron on Upper edge	4 1/2	5	4 1/2	5	4 1/2	5		
Average space...	4 1/2	5	4 1/2	5	4 1/2	5		
BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2		
Single or double Angle Iron on Upper Edge	3	5	3	5	3	5		
Average space...	3	5	3	5	3	5		
BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	4	4 1/2	4	4 1/2	4	4 1/2		
Single or double Angle Iron on Upper Edge	4	4 1/2	4	4 1/2	4	4 1/2		
Average space...	4	4 1/2	4	4 1/2	4	4 1/2		
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	16	12	16	12	16	12		
Rider Plate	11	12	11	12	11	12		
Bulb Plate to Intercoastal Keelson	5	9	5	9	5	9		
Angle Irons	5	9	5	9	5	9		
Double Angle Iron Side Keelson	5	9	5	9	5	9		
Side Intercoastal Plate	5	9	5	9	5	9		
do. Angle Irons	5	9	5	9	5	9		
Attached to outside plating with angle iron	5	9	5	9	5	9		
BILGE Angle Irons	5	9	5	9	5	9		
do. Bulb Iron	5	9	5	9	5	9		
do. Intercoastal plates riveted to plating for length	5	9	5	9	5	9		
BILGE STRINGER Angle Irons	5	9	5	9	5	9		
Intercoastal plates riveted to plating for length	5	9	5	9	5	9		
SIDE STRINGER Angle Irons	5	9	5	9	5	9		
Transoms, material. Knight-heads. Hawse Timbers.	Plating and angles							
Windlass	Patent							
	Roll Bitt							

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 3/4 in. Rivets, about 6 in apart.  
 The REVERSED ANGLE IRONS on floors and frames extend across middle line to Main Deck and to Upper Deck alternately  
 KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes  
 PLATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 1/8 ins. from centre to centre.  
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/8 ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/8 ins. from centre to centre.  
 Butts of Strakes at Bilge for one-half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.  
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/8 ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/8 ins. from cr. to cr.  
 Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.  
 Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.  
 Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.  
 Breadth of laps of plating in double riveting 8 3/4 Breadth of laps of plating in single riveting 2 3/4  
 Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?  
 How secured to Beams Bolts & nuts (Explain by Sketch, if necessary.)  
 On the various Decks, how secured to the sides? Beam ends turned & wedged of Breasthooks, Five Crutches, Three  
 A description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good  
 Manufacturer's name or trade mark, Thompson & Co & Brown & Co  
 The above is a correct description.  
 Builder's Signature, Richardson, Duck & Co Surveyor's Signature, Wm. Lloyd

IRON 453-0218



See Secretary's letter dated 18th February 1873

**Workmanship.** Are the butts of plating planed or otherwise fitted? Planed  
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes  
Are the fillings between the ribs and plates solid single pieces? Whole pieces  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes  
Do any rivets break into or through the seams or butts of the plating? Some in Butts

Masts, Bowsprit, Yards, &c., are Iron in good condition, and sufficient in size and length. If of Iron or Steel give  
Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing  
the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit Main Mast 4' 9" x 20" Same Mast 4' 3" x 20"  
Plates 1/16 three angles the entire length 3' x 3' x 1/16 & 3' x 2 1/2' x 5/16 Butts include a double  
riveted Seams single riveted plates a pair.

NUMBER for EQUIPMENT		Fathoms.		Inches.		Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> . <i>116</i> <i>117</i>	SAILS.	CABLES, &c.		<i>300</i>	<i>1 3/4</i>	<i>5 5 3/16</i>	<i>1 3/4</i>	<i>5 5 3/16</i>	Bowers ... <i>(Machine where Tested, date, and name of Superintendent.)</i>	<i>3</i>	<i>30-2-0</i>	<i>29-0-0-0</i>	<i>30-0-0-0</i>	<i>28 13/16</i>
	Fore Sails,	Chain ...												
	Fore Top Sails,	<i>(Machine where Tested, date, and name of Superintendent.)</i>												
	Fore Topmast Stay Sails	<i>Staffordshire Public Chain &amp; Anchor</i>												
	Main Sails,	<i>1/8 M. R. Reads Supr.</i>												
	Main Top Sails,	<i>11/16</i>												
and		Hempen Stream Cable		<i>90</i>	<i>1 1/8</i>	<i>11 1/16</i>	<i>11 1/16</i>	Stream ...	<i>1</i>	<i>12-0-0</i>	<i>12-0-0</i>	<i>12-0-0</i>	<i>12-0-0</i>	
		Hawser ...		<i>90</i>	<i>8</i>	<i>11 1/16</i>	<i>11 1/16</i>	Kedges ...	<i>2</i>	<i>12-0-0</i>	<i>12-0-0</i>	<i>12-0-0</i>	<i>12-0-0</i>	
		Towlines ...		<i>90</i>	<i>10</i>	<i>11 1/16</i>	<i>11 1/16</i>							
		Warp ...		<i>90</i>	<i>6</i>	<i>11 1/16</i>	<i>11 1/16</i>							
		quality		<i>90</i>	<i>5</i>	<i>11 1/16</i>	<i>11 1/16</i>							

Standing and Running Rigging Wine & Hemp sufficient in size and good quality. She has two Long Boats and three others  
The Windlass is Galvanic Capstan good and Rudder and Pumps (of Metal) good

**Engine Room Skylights.**—How constructed? 1/16 iron casing & oak skylight How secured in ordinary weather? Gratings

What arrangements for deadlights in bad weather? Gratings

**Coal Bunker Openings.**—How constructed? Iron comings 8/16 How are lids secured? Bars Height above deck? 18 in

**Scuppers, &c.**—What arrangements for clearing upper deck of water, in case of shipping a sea? Three scuppers each side  
Deck almost flush

**Cargo Hatchways.**—How formed? Iron comings 8/16

State size Main Hatch 28' x 12' Forehatch 18' x 8' 6" Quarterhatch 20' x 10'

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? Centre plates 20' x 8". Beams 7' x 7/16 & double angles on upper edge 3' x 2 1/2' x 5/16

Hatches, If strong and efficient? Yes

Order for Special Survey No. 124 DATES of  
Date March 20 1873 Surveys held  
Order for Ordinary Survey No. 184 while building  
Date March 20 1873 as per  
No. 184 in builder's yard. Section 18.

1st.	On the several parts of the frame, when in place, and before the plating was wrought	} <u>Seen twice each week during building</u>
2nd.	On the plating during the progress of riveting	
3rd.	When the beams were in and fastened, and before the decks were laid	
4th.	When the ship was complete, and before the plating was finally coated or cemented	
5th.	After the ship was launched and equipped	

**General Remarks,**  
Has water Ballast Tanks in Fore & Aft Head.  
Plange plate 1/16, girders 1/16, angles 3 1/2' x 3 1/2' x 1/16 & 3' x 2 1/2' x 5/16 stout weight per foot,  
pieces 1/16, top of tank 1/16.  
Richardson & Co.

State if one, two or three decked vessel, or if spar or awning decked, and length of poop, fore-castle or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement & Paint Outside Paint

I am of opinion this Vessel should be Classed 100 A 1

The amount of the Entry Fee ... £ 5 : : is received by me,  
Special ... £ 60 : 18 :  
Certificate ... : : :  
(Travelling Expenses)  
(if any) £

Committee's Minute 18th Feb 1873

Character assigned 100 A 1 Three Decked 22 Lloyd's Register

This vessel appears to be eligible to be classed 100 A 1 (Three deck) the upper deck to be 3 1/2' thick and the outfit is one grade exceeding the requirements of 22